

Attach #5



**INFORMATION DISCLOSURE
STATEMENT
BY APPLICANT**

(Use several sheets if necessary)

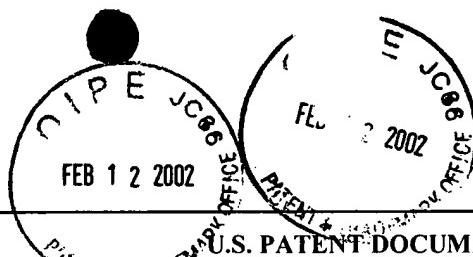
Docket Number: IMG-00112.P.1-US	Application Number: 09/884,579
Applicant: Singh	
Filing Date: June 18. 2001	Group Art Unit: 1642- 1632

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U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
MW	P1	4,816,397	03/1989	Boss et al.	—	—	
	P2	4,816,567	03/1989	Cabilly et al	—	—	
	P3	4,950,599	08/1990	Bertling	—	—	
	P4	4,959,313	09/1990	Taketo	—	—	
	P5	4,959,317	09/25/1990	Sauer	—	—	
	P6	4,975,369	12/1990	Beavers et al.	—	—	
	P7	5,028,540	07/1991	Humphries et al.	—	—	
	P8	5,049,502	09/1991	Humphries et al.	—	—	
	P9	5,162,215	11/10/1992	Bosselman et al.	—	—	
	P10	5,202,238	04/1993	Fell et al.	—	—	
	P11	5,204,244	04/1993	Fell	—	—	
	P12	5,258,299	11/1993	Humphries et al.	—	—	
	P13	5,340,740	08/1994	Petitte et al.	—	—	
	P14	5,464,764	11/1995	Capecchi et al.	—	—	
	P15	5,482,856	01/09/1996	Fell, Jr. et al.	—	—	
	P16	5,487,992	1/30/1996	Capecchi et al.	—	—	
	P17	5,545,806	08/1996	Lonberg et al.	—	—	
MW	P18	5,591,669	01/1997	Krimpenfort et al.	—	—	
MW	P19	5,595,898	01/21/1997	Robinson et al.	—	—	

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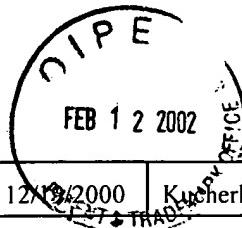


U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
Wm	P20	5,610,057	03/11/1997	Shen et al.			
	P21	5,627,059	06/06/1997	Cappecchi et al.			
	P22	5,631,153	05/20/1997	Cappecchi et al.			
	P23	5,643,745	07/1997	Stuart			
	P24	5,656,479	08/1997	Petitte et al.			
	P25	5,683,899	11/1997	Stuart			
	P26	5,695,965	12/1997	Stuart et al.			
	P27	5,833,985	11/10/1998	Ball et al.			
	P28	5,837,243	11/17/1998	Deo et al.			
	P29	5,846,533	12/08/1998	Prusiner, et al.			
	P30	5,851,808	12/22/1998	Elledge et al.			
	P31	5,897,861	04/27/1999	Fanger et al.			
	P32	5,916,771	06/29/1999	Hori et al.			
	P33	5,922,845	07/13/1999	Deo et al.			
	P34	5,928,914	07/27/1999	Leboulch et al.			
	P35	5,939,598	08/17/1999	Kucherlapati et al.			
	P36	5,985,615	11/16/1999	Jakobovits et al.			
	P37	5,998,144	12/07/1999	Reff et al.			
	P38	5,998,209	12/7/1999	Jakobovits et al.			
	P39	6,020,465	02/01/2000	Sekellick et al.			
	P40	6,066,778	05/23/2000	Ginsburg et al.			
	P41	6,075,181	06/13/2000	Kucherlapati et al.			
	P42	6,114,598	09/05/2000	Kucherlapati et al.			
Wm	P43	6,130,364	10/10/2000	Jakobovits et al.			
Wm	P44	6,143,559	11/07/2000	Michael et al.			

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	P45	6,162,293	12/13/2000	Kucherlapati et al.			
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FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	Translation
							YES NO
WU	F1	0 273 889	07/1988	EP			
	F2	0 088 994	09/1983	EP			
	F3	WO 86/01533	03/1986	WO			
	F4	WO 89/07142	08/1989	WO			
	F5	WO 91/10741	07/1991	WO			
	F6	WO 92/03918	03/1992	WO			
	F7	WO 92/15322	09/1992	WO			
	F8	WO 93/19172	09/1993	WO			
	F9	WO 93/25663	12/1993	WO			
	F10	WO 94/02602	02/1994	WO			
	F11	WO 95/02686	01/1995	WO			
	F12	WO 95/30739	11/1995	WO			
WU	F13	WO 98/58964	12/30/1998	WO			
WU	F14	WO 99/22764	05/14/1999	WO			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
EXAMINER INITIALS	CITATION	
WU	D1	Allioli et al., Use of Gonadal Primordial Germ Cells (PGCs) as Tools For Gene Transfer in Chickens," Methods Mol. Biol. 1997; 62: 425-32.
WU	D2	Andris-Widhopf et al, "Methods For the Generation of Chicken Monoclonal Antibody Fragments By Phage Display," Journal of Immunological Methods 242 (2000) pp. 159-181.
WU	D3	Araki et al., "Site-Specific Recombination of a Transgene in Fertilized Eggs By Transient Expression of Cre Recombinase," Proc. Nat'l Acad. Sci. USA 92: 160-164 (1995).

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<i>WW</i>	D4	Baba et al., "Cell Lines Derived From Avian Lymphomas Exhibit Two Distinct Phenotypes," Virology 1985 Jul 15; 144(1): 139-151.
	D5	Bebbington, C.R., (1991) "Expression of Antibody Genes in Nonlymphoid Mammalian Cells," Methods: A Companion to Methods Enzymol. 2:136-145.
	D6	Bos, et al., "Enhanced Transfusion of a Bacterial Plasmid of Hybrid Hybridoma (Quadroma Cell) Lines," Hybridoma (Feb. 1992), vol. 11, No. 1, pp. 41-51.
	D7	Brownstein et al.; Science 244:1348-1351 (1989); Isolation of Single-Copy Human Genes from a Library of Yeast Artificial Chromosome Clones.
	D8	Bruggemann et al., "Strategies For Expressing Human Antibody Repertoires in Transgenic Mice," Immunology Today 392 vol. 17 no. 8.
	D9	Bruggemann et al., Proc. Natl. Acad. Sci. USA 86:6709-6713 (1989); A Repertoire of Monoclonal antibodies with Human Heavy Chains from Transgenic Mice.
	D10	Bulfone-Paus et al., "The Chicken Immunoglobulin Lambda Light Chain Gene is Transcriptionally Controlled By a Modularly Organized Enhancer and an Octamer-dependent Silencer," Nucleic Acids Res. June 11, 1995; 23(11): 1997-2005.
	D11	Buttin G.; Trends in Genetics 3(8):205-206 (1987); Exogenous Ig Gene Rearrangement in Transgenic Mice: A New Strategy for Human Monoclonal Antibody Production.
	D12	Cao, et al., "A Rapid Non-Selective Method to Generate Quadromas by Microelectrofusion," J. Immunol. Methods (Nov. 16, 1995), vol. 187, No. 1, pp. 1-7.
	D13	Carlander et al, "Chicken Antibodies: A Clinical Chemistry Perspective," Ups J. Med. Sci 1999; 104(3): 179-189.
	D14	Carsience, et al., "Germline Chimeric Chickens From Dispersed Donor Blastodermal Cells and Compromised Recipient Embryos," Development 1993 Feb; 117(2): 669-75.
	D15	Cook GP, et al. "A Map of the Human Immunoglobulin VH Locus Completed by Analysis of the Telomeric Region of Chromosome 14q," Nat. Genet 1994 Jun; 7(2): 162-68.
	D16	Davies et al., "Selection of Specific Phage-display Antibodies Using Libraries Derived From Chicken Immunoglobulin Genes," J. Immunol. Methods 186: 125-135 (1995).
	D17	Dorfman, Nickolas A., 1985, "The Optimal Technological Approach to the Development of Human Hybridomas," Journal of Biological Response Modifiers, 4:213-239.
	D18	Etches et al., "Strategies For the Production of Transgenic Chicken," Methods Mol. Biol. 1997; 62: 433-50.
	D19	Feng et al., "Site-specific Chromosomal Integration in Mammalian Cells: Highly Efficient CRE Recombinase-mediated Cassette Exchange," J. Mol. Biol. Oct. 1, 1999; 292(4): 779-85
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<i>WW</i>	D21	Fontaine-Perus, J., "Mouse-chick Chimaera: An Experimental System for Study of Somite Development," Curr. Top. Dev. Biol. 1990; 48: 269-300.
	D22	Gefter ML, et al., "A Simple Method for Polyethylene Glycol-promoted Hybridization of Mouse Myeloma Cells," Somatic Cell Genet. 1977 Mar; 3(2): 231-6.
	D23	Genetic Technology News, "Origen's Transgenic Birds Join the Competition," vol. 17, no. 10/July 23, 1997.
	D24	Gibbins, Ann M. Verrinder, "The chicken, the egg and the ancient mariner," Nature Biotechnology, vol. 16: pp. 1013-1014. November 1998.
	D25	Green, L. L. et al., "Antigen-specific human monoclonal antibodies from mice engineered with human Ig heavy and light chain YACs," Nature Genetics (1994) 7:13-21.
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	D27	Hollenbaugh et al., "Recombinant Globulins: Novel Research Tools and Possible Pharmaceuticals," Current Opinion in Immunology, 1992, 4:216-219.
	D28	Inada et al., "In Vivo Gene Transfer Into the Blastoderm of Early Developmental Stage of Chicken," Reprod. Nutr. Dev. 1997; 37(1): 13-20.
	D29	Jakobovits, "Production of Fully Human Antibodies by Transgenic Mice," Current Opinion in Biotechnology 1995, 6:561-566.
	D30	Jiang et al., "Criss-crossed Interactions Between the Enhancer and the att Sites of Phage Mu During DNA Transposition," EMBO J. July 1, 1999; 18(13): 3845-55.
	D31	Kucherlapati et al., "Homologous recombination in mammalian somatic cells," Prog. Nucleic Acid Res. Mol. Biol., 36, pp. 301-310 (1989).
	D32	Lemamy et al., "High-affinity Antibodies From Hen's-egg Yolks Against Human mannose-6-phosphate/insulin-like Growth-factor-II Receptor (M6P/IGFII-R): Characterization and Potential Use in Clinical Cancer Studies," Int. J. Cancer Mar 15, 1999; 80(6): 896-902.
	D33	Little, M., "Of Mice and Men: Hybridoma and Recombinant Antibodies," Immunology Today; August 2000, 364 vol. 21 No. 8
	D34	Love et al., "Transgenic Birds by DNA Microinjection," Biotechnology (NY) Jan 1994; 12(1): 60-3.
	D35	Mast et al., "Development of Immunocompetence of Broiler Chickens," Vet. Immunol. Immunopathol Sep. 20, 1999; 70(3-4): 245-56.
	D36	Michael et al., "The antigen-binding characteristics of mAbs derived from in vivo priming of avian B cells," Proc. Natl. Acad. Sci., 95, pp 1166-1171 (1998).
<i>WW</i>	D37	Mohammed et al., "Deposition of Genetically Engineered Human Antibodies Into the Egg Yolk of Hens," Immunotechnology 4 (1998) pp. 115-125.

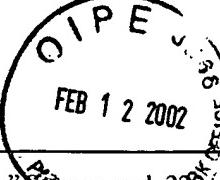
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	D39	Nishinaka et al., "Establishment of a Chicken X Chicken Hybridoma Secreting Specific Antibody," <i>Int. Arch. Allergy Appl. Immunol.</i> 1989; 89(4): 416-9.
	D40	Nishinaka et al., "A New Cell Line for the Production of Chicken Monoclonal Antibody by Hybridoma Technology," <i>J. Immunol. Methods</i> 1991 June 3; 139(2): 217-22.
	D41	Pain et al., "Chicken Embryonic Stem Cells and Transgenic Strategies," <i>Cells Tissues Organs</i> 1999; 165: pp. 212-219.
	D42	Petitte et al., "The Origin of the Avian Germ Line and Transgenesis in Birds," <i>Poult Sci</i> 1997 Aug; 76(8): 1084-92.
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	D46	Reynaud et al. " Somatic Hyperconversion Diversifies the Single V(H) Gene of the Chicken with a High Incidence in the D Region," <i>Cell</i> 59: 171-183 (1989).
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	D49	Sayegh et al., "Avian B Cell Development: Lessons From Transgenic Models," <i>Vet. Immunol. Immunopathol.</i> Dec 15, 1999; 72(1-2): 31-7.
	D50	Sherman et al. "Transposition of the Drosophila element mariner into the chicken germ line," <i>Nature Biotechnology</i> vol. 16: pp.1050-1053. November 1998.
	D51	Shimizu, et al., <i>PNAS USA</i> (1989) 86, 8020-8023.
	D52	Shuman, R.M. "Production of Transgenic Birds," <i>Experientia</i> 47 (1991) pp. 897-905.
	D53	Smith et al., "A Site-directed Chromosomal Translocation Induced in Embryonic Stem Cells by Cre-loxP Recombination," <i>Nature Genetics</i> 9: 376-385 (1995).
WU	D54	Stern, CD, "Chick Stem Cells," <i>Curr. Top. Microbiol. Immunol.</i> 1996; 212: 195-206.
WU	D55	Takahashi et al., "Cloning and Expression of the Chicken Immunoglobulin Joining (J)-chain cDNA," <i>Immunogenetics</i> Feb 2000; 51(2): 85-91.

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MM	D56	Van Den Berg et al., "Cre-mediated Site Specific Translocation Between Non-homologous Mouse Chromosomes," Proc. Nat'l. Acad. Sci. USA 92: 7376-7380 (1995).
	D57	Vora et al., "Altering the Antibody Repertoire via Transgene Homologous Recombination: Evidence for Global and Clone-autonomous Regulation of Antigen-driven B Cell Differentiation," J. Exp. Med. Vol. 181 Jan. 1995, pp. 271-281.
	D58	Wang et al., "High Frequency Recombination Between loxP Sites in Human Chromosomes Mediated By an Adenovirus Vector Expressing Cre-Recombinase," Somatic Cell and Mol. Genetics 21:429-441 (1995).
	D59	Watanabe et al., "Liposome-mediated DNA Transfer Into Chicken Primordial Germ Cells In Vivo," Mol. Reprod. Dev. July 1994; 38(3): 268-74.
	D60	BBC News "Scientists aim for chicken coup," April 10, 2000, available at http://news.bbc.co.uk/hi/english/sci/tech/newsid_705000/705241.stm
	D61	Yancopoulos et al.; Science 241 1581-1583 (1988); Reconstruction of an Immune System.
	D62	Zachau, "Ig Genes, Molecules and B-cell Development," Immunology Today, vol. 10, no. 8 1989 Supplement, pp s9-s10.
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